# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/630,461 | 07/30/2003 | Lynda Fengler | 200301157-1 | 9160 |

22879        7590        07/11/2008
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

| EXAMINER |
|---|
| INGBERG, TODD D |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2193 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 07/11/2008 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>24 March 2008</u>.

2a)☒ This action is **FINAL**.    2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 July 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All    b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

Claims 1 – 34 have been examined.

### *Drawings*

1.      New Figure filed September 25, 2007 has been accepted.

### *Specification*

2.      The title of the invention is not descriptive. A new title is required that is clearly
indicative of the invention to which the claims are directed. Legal words like method and system
should be removed. Examiner appreciates the Applicant's position. At time of allowance the
Examiner will revisit the title.

### *Claim Rejections - 35 USC § 103*

3.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.      Claims 1- 3 and 5 - 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the
commercial product by Hewlett Packard, known as OpenView (Also, sold by Computer
Associates under the name UniCenter TNG – see HP, page 189), as taught by Nathan Muller in
the text book, "Focus on HP OpenView A Guide to Hewlett-Packard's Network and Systems
Management Platform" (Referred to as **HP**), published March 1995 in view of USPN #5,622,604
**Russell** et al filed November 18, 1992 and issued April 22, 1997.

**Claim 1**
A methods for facilitating installation of firmware on a printing device, the method comprising:
transmitting from a computer a notification that firmware is available for installation on a
printing device; receiving with the computer a firmware download request; and transmitting a

firmware file directly to the printing device to enable installation of the firmware on the printing device.

## Rejection for Claim 1

HP is a commercial product which is also sold as Computer Associates UniCenter TNG (HP, page 189), that teaches managed environments to provide Network and System Management (HP, page 1). HP provides the ability to download firmware (HP, pages 256, 116). HP supports the ability to execute actions such as PUSH (locally executed) or PULL operations (remote execution) of actions by providing the ability to execute actions locally or remotely in support of the environment (HP, Action Execution, page 69). And provides communications with messaging to intelligent network devices/ peripheral such as printers (HP, page 67, message allowed). In addition to the enabling of messaging to devices HP supports the use of email to support operations of the managed environment (HP, pages 130, 165) One of ordinary skill should find use of email to send a notification well within the grasp and part of the intended use of email. HP provides for tracking changes on remote devices and registers the information (HP, pages 164, 193) and determining the status of hardware, software and firmware (HP, Auto Discovery, page 164 and HP, Change Orchestration, page 184). Downloads and configurations of what is installed and the dependencies of installed products is maintained in HP OpenView (HP, page 182 – Software Management and HP, page 179 - 181, Software Distributor and Distribution Overview , Distribution Depots/ Target System). Although, HP provides the infrastructure to support intelligent devices. the reference does not explicitly teach a printer requesting a download and installing on the printer the firmware update. It is Russell who explicitly teaches the updating of the firmware on a printer (Russell, Col 2, lines 45 – 61, firmware image). And Russell teaches the request for update coming from the printer (Russell, See Figure 20, S2004 download new software and see S2002 the board in the printer is the target and must reply). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to take the infrastructure and capabilities of HP OpenView and support the ability of Intelligent peripherals as taught by Russell and enable Intelligent peripherals to be supported in the managed environment, because "… printers can be directly update[s]d and eliminate the necessity of dedicating a personal computer to manage printers (Russell, col 1, lines 10 - 20).

## Claim 2

The method of claim 1, wherein transmitting a notification comprises transmitting a notification directly to the printing device.

## Rejection for Claim 2

HP teaches the ability to communicate with intelligent devices (HP, page 67) and the ability to determine changes in the environment by tracking ongoing changes and dynamically updates the map to reflect those changes (HP, page 164). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to utilize the features of HP OpenView to support the updating of intelligent devices/ peripheral by tracking changes (See claim 1), determining updates based on gathered information (HP, see claim 1) and downloading firmware updates to an intelligent device (printer). Because keeping managed environments up to date with automated change management (HP OpenView), saves money.

Also, Russell Figure 20 shows a broadcast for target NEB the board in the printer.

**Claim 3**
The method of claim 1, wherein transmitting a notification comprises transmitting an email to the user. HP teaches the use of email messages to support the managed environment (HP, pages 130, 165). The use of sending an email to support operations such as notifying a user of an update is deemed intended use of email and taught by the HP reference.

**Claim 5**
The method of claim 1, wherein receiving a firmware download request comprises receiving a firmware download request transmitted is the computer from the printing device. (Russell, Figure 20, S2002 the printer which is the target must reply and the download is directly to the board in the printer, #s2003 and S2004).

**Claim 6**
The method of claim 1, wherein transmitting a firmware file comprises transmitting a remote update (RFU) file directly to the printing device. HP, stores the code to update in the Software Distribution system for each target system (HP, pages 179-181).

**Claim 7**
The method of claim 1, further comprising registering the printing device with a firmware service (HP, page 68, collecting data from managed nodes and HP, page 164, Auto Discovery) and determining whether to transmit a notification based upon information that was collected through registration of the printing device (HP, pages 76 – 79).

**Claim 8**
A system for facilitating installation of firmware on a printing device the system comprising:
        means for transmitting a notification to a device indicating that new firmware is available for installation on the printing device;
        means for receiving a firmware download request; and
        means  for transmitting a firmware file directly to the printing device.
As per claim 1.

**Claim 9**
The system of claim 8, wherein the means for transmitting a notification comprise means for transmitting a notification directly to a printing device. As per claim 2.

**Claim 10**
The system of claim 8, wherein the means for transmitting a notification comprise means for transmitting an email message to a user, the email message including a link to a network page at which firmware download can be requested. As per  claim 4.

**Claim 11**
The system of claim 8, wherein the means for transmitting a firmware file comprise means for transmitting a remote firmware update (RFU) file to the printing device. As per claim 6.

**Claim 12**
The system of claim 8, further comprising means for registering a printing device with a
firmware service. As per claim 7.

**Claim 13**
A method for facilitating installation of firmware on a printing device, the method comprising:
a peripheral device receiving a firmware availability notification; and the printing device
providing a related notification to a user. (Russell Figure 20 shows a broadcast for target NEB
the board in the printer). And Figure 20, #2006, shows a notification of the Operator for errors
from the download.

**Claim 14**
The method of claim 13, wherein the printing device providing a related notification to a user
comprises the printing device providing a notification on a network page (HP, page 77, Message
Browser) using a network server embedded in the printing device (Russell, Figure 20 shows the
device is directly connected (Claim 1 motivation) and handles notifications (also claim1), also
part of HP – claim 1 – intelligent peripheral).

**Claim 15**
The method of claim 13, wherein the printing device providing a related notification to a user
comprises the printing device transmitting a message to a user computing device. (Russell, col 2,
lines 20-25).

**Claim 16**
The method of claim 13, wherein the printing device providing a related notification to a user
comprises the printing device displaying a notification in a display of the printing device.
(HP, communications to intelligent peripherals of claim1 and notifications in OpenView in claim
1 and the printing of the notification on the printer (Note – "display of the printer device" – can
display of a message.)

**Claim 17**
The method of claim 13, further comprising the printing device receiving a request to install
available firmware. (As per claim 1, see the ability to perform PUSH operations and
communicate with intelligent peripherals)

**Claim 18**
The method of claim 17, further comprising the printing device transmitting a firmware
download request to a firmware service. (HP as per claim 1, the ability to execute remotely and
Russell, Figure 20, #S2003 and S2004 ).

**Claim 19**

The method of claim 18, further comprising. the printing device receiving a firmware file and installing the firmware on the printing device. (Russell, Figure 20, S2007 run the downloaded file).

**Claim 20**
A system for facilitating installation of firmware on a printing device, the system comprising:
      means provided on a printing device for receiving a notification from a firmware service that new printing device firmware is available for download; and means provided on the printing device for providing a related notification to a device user. As per claim 1.

**Claim 21**
The system of claim 20, wherein the means for providing a related notification comprise an embedded network server of the printing device that is configured to post a notification on a network page. See claim 14.

**Claim 22**
The system of claim 20, wherein the means for providing a related notification comprise means for transmitting a message from the printing device to a user computing device. As per claim 15.

**Claim 23**
The system of claim 20, wherein the means for providing a related notification comprise means for displaying a notification in a display of the printing device. As per claim 16.

**Claim 24**
The system of claim 20, further comprising means for receiving and installing a firmware file on the printing device. As per claim 19.

**Claim 25**
A computer readable medium that contains a firmware service, the service comprising:
logic configured to transmit firmware availability notifications directly to the printing devices:
logic configured to receive firmware download requests from the printing device; and logic configured to transmit firmware files directly to the printing devices.
See the rejection for claim 1, claim 5 and claim 6.

**Claim 26**
The computer readable medium of claim 28, wherein the logic configured to transmit firmware files comprises logic configured to transmit remote firmware update (RFU) files directly to the printing devices. As per claim 6.

**Claim 27**
The computer-readable, medium of claim 25, further comprising logic configured to register printing devices with the firmware service. As per claim 7.

**Claim 28**

The computer-readable medium of claim 27, further comprising logic configured to determine whether to transmit firmware availability notifications based upon collected printing device registration information. As per claim 7.

**Claim 29**
A printing devices, comprising: memory including logic configured to directly receive firmware availability notifications that are transmitted by a firmware service via a network; and logic configured to provide related notifications to a user. As per claims 1, 2 and 3.

**Claim 30**
The printing device of claim 29, wherein the logic configured to provide related notifications comprises an embedded network server that is configured to post notifications on network pages accessible via a network browser. See claim 14.

**Claim 31**
The printing device of claim 29, wherein the logic configured to provide related notifications comprises logic configured to transmit email messages to a user computing device that indicate that firmware is available for installation. As per claim 3.

**Claim 32**
The printing device of claim 29, further comprising a display and wherein the logic configured to provide related notifications comprises logic configured to present notifications in the display. As per claim 16.

**Claim 33**
The printing device of claim 29, further comprising logic configured to receive a firmware installation request and logic configured to transmit a firmware download request to the firmware service. As per claim 1.

**Claim 34**
The printing device of claim 33, further comprising logic configured to receive and install firmware files. As per claim 19.

5.      Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over HP and Russell as

applied to claims 1 –3 and 5 - 31 above, and further in view of USPN #6,424,424 Lomas, filed

January 19, 1999.

Although, HP OpenView disclosed Motif (HP, page 164 and 190) and intelligent peripherals.

Russell's intelligent peripheral communicates on a network Where the printer is connected

directly to the network eliminating the need for a personnel computer to manage printer(s).

Neither specifically disclose the use of an email specifically for an update. It is Lomas who

teaches the use of the use of an embedded link in an email for a network printer (Lomas,

Abstract and Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art

at the time of invention to combine HP, Russell and Lomas, because the embedded link in email

provides a means of giving instruction for installation (Lomas, col 1, lines 30-42).

**Claim 4**
The method of claim 3, wherein transmitting an email message to a user comprises transmitting a

link to a network page at which firmware download can be requested (As per above).

### *Response to Arguments*

6.      Applicant's arguments filed March 24, 2008 have been fully considered but they are not

persuasive.

**Applicant's Remarks**
"I. Claim Rejections - 35 U.S.C. § 103(a)

As has been acknowledged by the Court of Appeals for the Federal Circuit, the

U.S. Patent and Trademark Office ("USPTO") has the burden 35 U.S.C. § 103 to establish

obviousness by showing objective teachings in the prior art or generally available knowledge of

one of ordinary skill in the art that would lead that individual to the claimed invention. In re Fine,

837 F.2d 1071, 1074, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). The key to supporting an

allegation of obviousness under 35 U.S.C. § 103 is the clear articulation of the reasons why the

Examiner believes that claimed invention would have been obvious. See MPEP § 2141. As

stated by the Supreme Court, "[r]ejections on obviousness cannot be sustained by mere

conclusory statements; instead, there must be some articulated reasoning with some rational

underpinning to support the legal conclusion of obviousness." KSR v. Teleflex, 550 U.S. at __,

82 USPQ2d at 1396 (quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir.

2006)).

Applicant respectfully submits that the Examiner has not established with clearly articulated reasons that Applicant's claims are obvious in view of the prior art. Applicant discusses those claims in the following

A. Rejection of Claims 1-3 and 5-34

Claims 1-3 and 5-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over a book entitled "The OpenView Framework" ("the OpenView reference") in view of Russell, et al. ("Russell," U.S. Pat. No. 5,623,604). Applicant respectfully traverses.)"

**Examiner's Response**

Applicant's use of case law is not persuasive. For Applicant's use of the Fine and KSR case laws to be persuasive. One of ordinary skill in the art would need more clearly articulated reason for combining the references. In reviewing the rejection it is clear to one of less than ordinary skill in the art at the time of invention the motivation to combine the references. The motivation to provide the ability to update a printer directly as taught by the combination and the motivation is clearly provided.

Motivation

*Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to take the infrastructure and capabilities of HP OpenView and support the ability of Intelligent peripherals as taught by Russell and enable Intelligent peripherals to be supported in the managed environment, because "... printers can be directly update[s]d and eliminate the necessity of dedicating a personal computer to manage printers (Russell, col 1, lines 10 - 20).*

The motivation of Russell (filed November 18, 1992) to eliminate the need for a personal computer to be dedicated to manage printers is clearly stated. One of less than ordinary skill in the art would understand, Russell is sending firmware update directly to the printer. And that the Russell teaching is the client side of the process. HP (Assignee) OpenView (commercial product) as documented in the March 1995 text book, teaches the server side of the process.

Furthermore, the Assignee (Hewlett-Packard) was engaged in the business of remotely administering in real-time through UniCenter TNG (the commercial product name OpenView is sold under by Computer Associates see OpenView page 188 et al.), printers with a 3-D Real World Interface.

The following is from the November 27, 1997 M2 Presswire, Press Release.

"Hewlett-Packard Company and Computer Associates International, Inc. today
announced that HP has integrated its advanced desktop-management solutions, including
TopTools management software, with CA's Unicenter TNG Framework.
CA's Unicenter TNG Framework provides the open management infrastructure and
distributed services which, in conjunction with HP TopTools management software, provide
customers with powerful enterprise desktop management capabilities right out of the box.
The joint technology collaboration allows Unicenter TNG to identify HP systems automatically
and incorporate them in Unicenter TNG's enterprise-wide policy and Business Process Views.
By integrating HP TopTools, NetServer Assistant, HP JetAdmin and AdvanceStack
management products with Unicenter TNG, the companies have furthered their joint efforts
to simplify technology-management tasks, provide seamless integration of enterprise
resources and reduce total costs of IT ownership. HP's full line of desktop systems and
hardware components -including HP Vectra PCs, HP Kayak PC Workstations, HP NetServer
systems, HP AdvanceStack hubs and switches **and HP printers can now fully**

**exploit Unicenter TNG's end-to-end management capabilities,**

**without requiring that customers perform any additional**

**integration. An HP LaserJet 5 printer, for example, can be remotely**

**administered in real-time through Unicenter TNG's 3-D Real World**

**Interface**. " Also, see the preamble to claim 1 which reads as follows: "HP is a commercial
product which is also sold as Computer Associates UniCenter TNG (HP, page 189), that teaches
managed environments to provide Network and System Management (HP, page 1). " Applicant's
September 25, 2007 directed toward the relevance of the HP OpenView reference is as follows:

From Applicant's response dated September 25, 2007 page 14.
 "In view of the above, it **is difficult to understand not only how the Open View document
can be cited as a base reference in rejecting Applicant's claims under 35 U.S.C. § 103 but
how the Open View document is even relevant to Applicant's claims."**

Assignee's (HP) ability to directly manage remote printers through a 3-D interface dating back to
November 27, 1997 had not been disclosed in an Information Disclosure Statement (IDS) and

Applicant's portrayal of the level of ordinary skill in the art, to support the case law requiring a
more clearly articulated reason to combine the references is not support by the prior art of record.
In fact, the contrary is present in the record. One of less than ordinary skill well prior to the time
of invention would know how to combine the teachings of HP's commercial OpenView product
with the Russell teaching. And understand the motive as provided by the Office from the Russell
reference. Applicant's use of case law is not persuasive.

**Applicant's Arguments**

"1. Claims 1-3 and 5-7

Independent claim 1 provides as follows:

1. A method for facilitating installation of firmware on a printing device, the method comprising:

transmitting from a computer a notification that firmware is available for installation on a
printing device;

receiving with the computer a firmware download request; and

transmitting a firmware file directly to the printing device to enable installation of the firmware
on the printing device.

As an initial matter, Applicant notes that the Examiner did not address the limitation
"transmitting from a computer a notification that firmware is available for installation on a
printing device". Instead, the Examiner provided a brief summary of what the Examiner believes
to be disclosed in the OpenView reference. Although the Examiner correctly identified that the
OpenView reference mentions firmware downloading, the Examiner did not indicate that the
OpenView reference discloses "transmitting from a computer a notification that firmware is
available for installation on a printing device". As a further matter, nowhere did the Examiner
explain how the OpenView reference would render such a notification obvious. Accordingly, the
Office Action fails to address an explicit limitation of Applicant's claim 1.

Applicant further notes that the Examiner did not address the limitation "receiving with the
computer a firmware download request". Instead, the Examiner indicated that Russell discloses
downloading a ROM firmware image to an interactive network board provided in a peripheral
device. Not explained, however, is how such downloading discloses or suggests receiving a
"firmware download request" as is explicitly recited in claim 1.

In view of the above, it is clear that the Examiner has failed to address explicit limitations of claim 1 and therefore has failed to state a prima facie case of obviousness. Applicant therefore respectfully requests that the rejections to claims 1-3 and 5-7 be withdrawn. Applicant further submits that, if the Examiner wishes to maintain the rejection, the Examiner must clearly articulate how the OpenView reference or the Russell reference discloses or renders Applicant's explicit limitations obvious. See KSR v. Teleflex, 550 U.S. (2007).

**Examiner's Response**

Initial Matter

Applicant's statement that the rejection does not teach transmitting a notification from a computer to the printer is not accurate. The limitations are met by the combination of HP OpenView's product and Russell teaching as disclosed through USPN# 5,623,604.

The ability to connect an intelligent device (printer) of Russell to the commercial product of HP OpenView (also sold as UniCenter TNG). Where the OpenView reference clearly teaches a managed environment with email capability and routine decisions based on the changing configuration. The notification limitation does not distinguish itself from the mundane task of an operator sending an email. The rejection stated, "In addition to the enabling of messaging to devices HP supports the use of email to support operations of the managed environment (HP, pages 130, 165). One of ordinary skill should find use of email to send a notification well within the grasp and part of the intended use of email." Applicant argues the Office Action failed to render such a notification obvious in view of the rejection above, the Examiner does not find the Applicant's argument accurate. The limitation argued in the "initial matter" is taught.

Response to the Receiving a Request for Download Argument

Applicant further argues "… the Examiner did not address the limitation "receiving with the computer a firmware download request". Instead, the Examiner indicated that Russell discloses downloading a ROM firmware image to an interactive network board provided in a peripheral device. Not explained, however, is how such downloading discloses or suggests receiving a "firmware download request" as is explicitly recited in claim 1." The Examiner disagrees with the Examiner explicitly teaches that HP OpenView teaches both PUSH and PULL technology. One of ordinary skill should understand the meanings of these terms to be PUSH where the server pushes to the client and PULL where the client can request from the server. The following is from the rejection. "HP supports the ability to execute actions such as PUSH (locally executed) or PULL operations (remote execution) of actions by providing the ability to execute actions locally or remotely in support of the environment (HP, Action Execution, page 69). "

The rejection is a combination of the ability to combine the teachings of OpenView and the Russell reference where the intelligent printer communicates directly with HP OpenView (PUSH and PULL). The following part from the reference does not just address the limitation in question but teaches the argued limitation. From the Office action, "It is Russell who explicitly teaches the updating of the firmware on a printer (Russell, Col 2, lines 45 – 61, firmware image). And

Russell teaches the request for update coming from the printer (Russell, See Figure 20, S2004 download new software and see S2002 the board in the printer is the target and must reply). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to take the infrastructure and capabilities of HP OpenView and support the ability of Intelligent peripherals as taught by Russell and enable Intelligent peripherals to be supported in the managed environment, because "... printers can be directly update[s]d and eliminate the necessity of dedicating a personal computer to manage printers (Russell, col 1, lines 10 - 20)."
<u>Disposition for Claim 1</u>

Applicant's arguments have not provided a non obvious distinction of the claimed invention and the combination of references. The rejection is maintained.

<u>Rejection is a Combination of References</u>
Although, HP provides the infrastructure to support intelligent devices. the reference does not explicitly teach a printer requesting a download and installing on the printer the firmware update.

It is Russell who explicitly teaches the updating of the firmware on a printer (Russell, Col 2, lines 45 – 61, firmware image). And Russell teaches the request for update coming from the printer (Russell, See Figure 20, S2004 download new software and see S2002 the board in the printer is the target and must reply). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to take the infrastructure and capabilities of HP OpenView and support the ability of Intelligent peripherals as taught by Russell and enable Intelligent peripherals to be supported in the managed environment, because "... printers can be directly update[s]d and eliminate the necessity of dedicating a personal computer to manage printers (Russell, col 1, lines 10 - 20).

**Applicant's Arguments**

"2. Claims 8-12

Independent claim 8 provides as follows:

8. A system for facilitating installation of firmware on a printing device, the system comprising:

means for transmitting a notification to a device indicating that new firmware is available for installation on the printing device;

means for receiving a firmware download request; and

means for transmitting a firmware file directly to the printing device.

Regarding claim 8, Applicant submits that the Office Action has failed to state a prima facie case of obviousness by failing to address explicit limitations of the claim. In particular, the Office Action has not identified where either applied reference discloses or suggests "means for transmitting a notification to a device indicating that new firmware is available for installation on

the printing device" or "means for receiving a firmware download request". Applicant therefore respectfully submits that the rejections of claims 8-12 should be withdrawn."

**Examiner's Response**

This argument was made and responded to in the response to arguments for claim 1 above.


**Applicant's Arguments**

"3. Claims 13-19

Independent claim 13 provides as follows:

13. A method for facilitating installation of firmware on a printing device, the method comprising:

a printing device receiving a firmware availability notification; and the printing device providing a related notification to a user.

In the Office Action, it is alleged that Russell discloses a printing device "receiving a firmware availability notification". For support, the Office Action identifies Figure 20 of the Russell reference, which contains a block $2001 labeled "ACTIVATE LAN BROADCAST FOR TARGET NEB". As an initial matter, Applicant notes that the Examiner has not explained how that label comprises a disclosure or a suggestion of a printing device "receiving a firmware availability notification". Applicant therefore submits that the Examiner has also failed to state a prima facie case against claim 13.

As a further matter, Applicant notes that the "broadcast" described in Figure 20 has nothing to do with a printing device "receiving a firmware availability notification". Instead, Russell states that a network administrator activates a DOWNLOADER program to broadcast "a request for identification of all NEB devices having a particular configuration". Russell, column 48, lines 56-61. Therefore, Russell's "broadcast" clearly is a request for identification, not a firmware availability notification.

It is also alleged in the Office Action that Russell discloses a printing device "providing a related notification to a user". For support, the Office Action identifies block $2006 of Figure 20 of the Russell reference, which is labeled "NOTIFY OPERATION OF ERROR AND PURGE DRAM." As can be readily appreciated from that phrase, the "notification" identified by the

Examiner is actually an error notification and therefore has nothing to do with a notification that

firmware is available for downloading.

In view of the above, Applicant respectfully submits that the rejections to claims 13-19 should be

withdrawn."

**Examiner's Response**

Applicant's argument about firmware notification is responded to in the response to claim 1 and

is redundant in present claims.

<u>Request for Download Argument</u>

Part of Applicant's response fails to acknowledge the actual rejection for the notification of

firmware availability as taught in claim 1. The response to that argument is taught above in

response to claim 1. The majority of Applicant's arguments point away from the actual rejection.


Applicant states the following:" In the Office Action, it is alleged that Russell discloses a

printing device "receiving a firmware availability notification". For support, the Office Action

identifies Figure 20 of the Russell reference, which contains a block $2001 labeled "ACTIVATE

LAN BROADCAST FOR TARGET NEB". As an initial matter, Applicant notes that the

Examiner has not explained how that label comprises a disclosure or a suggestion of a printing

device "receiving a firmware availability notification". Applicant therefore submits that the

Examiner has also failed to state a prima facie case against claim 13."

Applicant refers to the teaching as merely a label in a box and not to the actual technical teaching

of the reference. When one takes the reference as a whole as required in Patent prosecution and

reviews the actual technical meaning depicted in the diagram, one of ordinary skill in the art see

the description of the "label". The following is from column 48 lines 55 to the end of page.

```
After the board has been powered-up at Step S1, the flow proceeds to
Step S2001 at which point the network administrator activates a
DOWNLOADER program to broadcast over the LAN a request for
identification of all NEB devices having a particular configuration
whereupon flow advances to Step S2002.
In Step S2002, the DOWNLOAD program determines whether any target NEBs
have responded. If in Step S2002 it is determined that no target NEBs
have responded, flow returns to Step S2001 in which the DOWNLOAD
program rebroadcasts the request with new target information and then
flow advances to Step S2002.
```

In the section a downloader program has broadcast over the LAN to devices of a particular configuration a request for identification. The downloader checks for devices that have responded. The ability to request a broadcast is taught at the client side to activate a PULL.

**Applicant's Arguments**

"4. Claims 20-24

Independent claim 20 provides as follows:

20. A system for facilitating installation of firmware on a printing device, the system comprising:

means provided on a printing device for receiving a notification from a firmware service that new printing device firmware is available for download; and

means provided on the printing device for providing a related notification to a device user.

Regarding claim 20, Applicant refers the Examiner to the discussion of claim 13 above. As is apparent from that discussion, Russell does not in fact disclose a printing device "receiving a notification from a firmware service that new printing device firmware is available for download" or "providing a related notification to a device user". Applicant therefore respectfully submits that the rejections of claims 20-24 should be withdrawn."

**Examiner's Response**

Applicant's argument present for claims 20-24 are answered in response to claim1 and 13-19 above.

**Applicant's Arguments**

"5. Claims 25-28

Independent claim 25 provides as follows:

25. A computer-readable medium that contains a firmware service, the service comprising:

logic configured to transmit firmware availability notifications directly to printing devices;

logic configured to receive firmware download requests from the printing devices; and

logic configured to transmit firmware files directly to the printing devices.

Regarding claim 25, Applicant refers the Examiner to the discussion of claim 1 above. As indicated in that discussion, the Examiner has failed to address Applicant's limitations regarding transmitting "firmware availability notifications" to a printing device or receiving "firmware download requests" from a printing device. Applicant therefore respectfully submits that the rejections of claims 25-28 should be withdrawn."

**Examiner's Response**

The response to the present argument is answered in the response to argument for claim 1.

**Applicant's Arguments**

"6. Claims 29-34

Independent claim 29 provides as follows:

29. A printing device, comprising:

memory including:

logic configured to directly receive firmware availability notifications that are transmitted by a firmware service via a network; and

logic configured to provide related notifications to a user.

Regarding claim 29, Applicant refers the Examiner to the discussion of claim 13 above. As is apparent from that discussion, Russell does not in fact disclose a printing device receiving a firmware availability notification from a firmware service or providing a related notification to a user. Applicant therefore respectfully submits that the rejections of claims 29-34 should be withdrawn."

**Examiner's Response**

For the same reasons in response to argument to claim 13 the present argument has been answered.

**Applicant's Arguments**

"B. Rejection of Claim 4

Claim 4 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the OpenView reference and Russell as applied to claims 1-3 and 5-31, and further in view of Lomas (U.S. Pat. No. 6,424,424). Applicant respectfully traverses the rejection.

As identified above, the OpenView reference and Russell do not teach aspects of Applicant's claims. In that Lomas does not remedy the deficiencies of the other two references, Applicant respectfully submits that claim 4 is allowable for at least the same reasons that claim 1 is allowable."

**Examiner's Response**

No specific argument is present.

## *Conclusion*

7.    **THIS ACTION IS MADE FINAL.**  Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action.  In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

## *Correspondence Information*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723.  The

examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lewis Bullock can be reached on (571) 272-3759.  The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Todd  Ingberg/
Primary Examiner, Art Unit 2193